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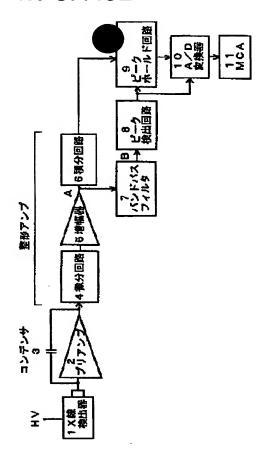
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TITLE

: INSTRUMENT FOR RADIATION

**MEASUREMENT** 



ABSTRACT :

PROBLEM TO BE SOLVED: To provide a radiation measuring instrument capable of enhancing the S/N ratio of a low energy peak, and preventing the through-put by A/D conversion of a noise from being lowered.

SOLUTION: Radiation gets incident on the X-ray detector 1 of a semiconductor, a pulse signal thereof is amplified by a preamplifier 2, and a voltage waveform signal of a stepped shape is differentiated by the differentiating circuit 4 of a shaping amplifier to be amplified to a prescribed magnification by an amplifier 5 after a DC component is cut. An output thereof is passed through a band-pass filter 7 to reduce a noise peak in a low energy part, a peak of the signal is detected using a detection threshold value by a peak detecting circuit 8, a signal from an integrating circuit 6 is held by a peak holding circuit 9 based thereon, and the timing for the A/D conversion is controlled to read a digital signal into an MCA 11.

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